DIRECT DRIVE TURNTABLE

PL-518 KUT KCT

PIONEER®

OPERATING INSTRUCTIONS

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

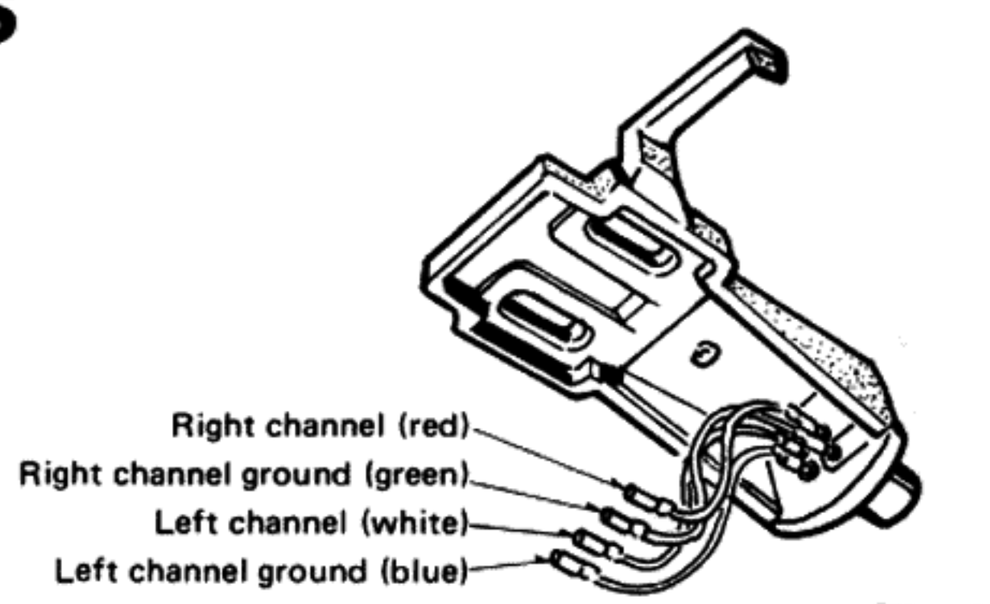


Fig. 1

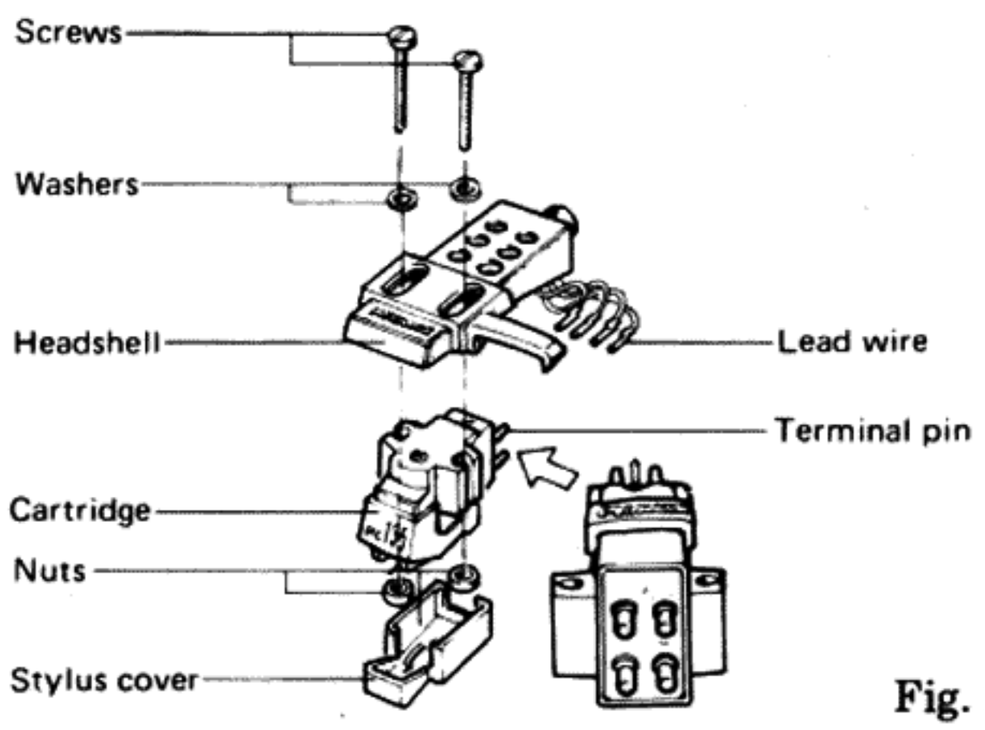


Fig. 2

ATTACHING THE CARTRIDGE

You can attach any cartridge to this turntable weighing between 4g and 10g on condition that only the accessory headshell is used with it. Follow the procedure outlined below for attaching the cartridge to the headshell.

1. Take out the headshell, cartridge mounting screws, nuts, washers and small-sized screwdriver from the accessory box.
   The screws come in three different lengths so choose the screws according to the height of the cartridge you intend to attach.
2. The terminals on the accessory headshell are aligned as shown in Fig. 1. Check the location and polarity of each of the cartridge's terminal pins and then connect the lead wires, taking care not to get the polarities mixed up.

NOTE:
Do not solder when you connect the lead wires to the cartridge. If the lead wire lugs are loose, use a pair of tweezers or a similar object to push in the end lightly.

3. Attach the cartridge lightly to the headshell using the screws, nuts and washers (Fig. 2).
4. Adjust the position of the cartridge so that the stylus and the connector section of the headshell are 49mm apart and tighten up the screws. Make sure that the cartridge does not tilt to one side when you attach it (see Fig. 3).

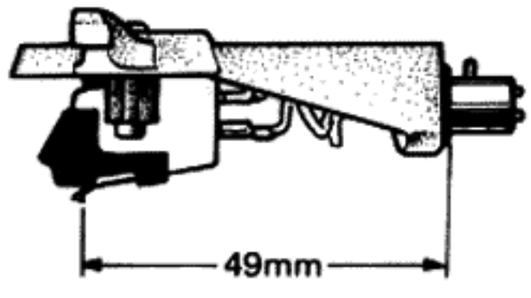


Fig. 3

ATTACHING HEADSHELLS NOT MADE BY PIONEER

You can attach headshells made by other companies as long as the coupling portion has the same dimensions as the headshell supplied with your PL-518. However, you should check whether the terminals on the other headshell are aligned in the same way. When attaching, make sure that you do not neglect to carry out the four steps described above.

IMPORTANT NOTICE: The serial number for this equipment is located on the rear. Please write this serial number on your enclosed warranty card and keep in a secure area. This is for your security.

SPECIFICATIONS

Motor and Turntable

Drive System:	Direct-drive
Motor:	DC servomotor (16 pole 24 slot)
Turntable Platter:	320mm diam. aluminum alloy die-cast
Speeds:	33-1/3 and 45rpm
Speed Control Range:	±2%
Wow and Flutter:	Less than 0.03% (WRMS)
Signal-to-Noise Ratio:	More than 73dB (DIN-B) (with Pioneer cartridge model PC-135)

Tonearm

Type:	Static-balance type, S-shaped pipe arm
Effective Arm Length:	221mm
Overhang:	15.5mm
Tracking Error:	0.525 deg./in, 0.21 deg./cm
Usable Cartridge Weight:	4g (min.) to 10g (max.)

Other Features

Auto-return mechanism, Anti-skating force control, Cueing device
Detachable dust cover, Insulator feet, Plug-in type headshell
Strobe light, 40mm-thick particle board cabinet

Miscellaneous

Power Requirements:	AC 120V, 50/60Hz
Power Consumption:	7W
Dimensions:	440(W) x 145(H) x 365(D) mm 17-5/16(W) x 5-11/16(H) x 14-3/8(D) in
Weight:	9.5kg/20lb 15oz

Accessories

EP adaptor 1
Screwdriver 1
Cartridge mounting screws 6
Cartridge mounting nuts 2
Cartridge mounting washers 2
Operating instructions 1

NOTE:
Specifications and design subject to possible modification without notice, due to improvements.

ASSEMBLY PROCEDURE

1. ATTACHING THE COUNTERWEIGHT

Slide the counterweight onto the counterweight shaft at the rear end of the tonearm and turn it 3 to 4 times in a clockwise direction (Fig. 4).

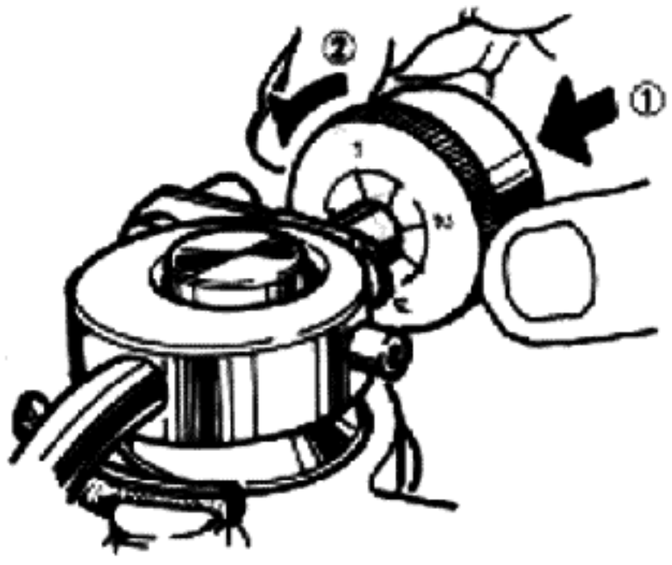


Fig. 4

2. ATTACHING THE HEADSHELL

Insert the headshell (with the cartridge already attached) onto the end of the tonearm (align the guide pin with the groove as shown in Fig. 5), and secure by turning the locking collar.

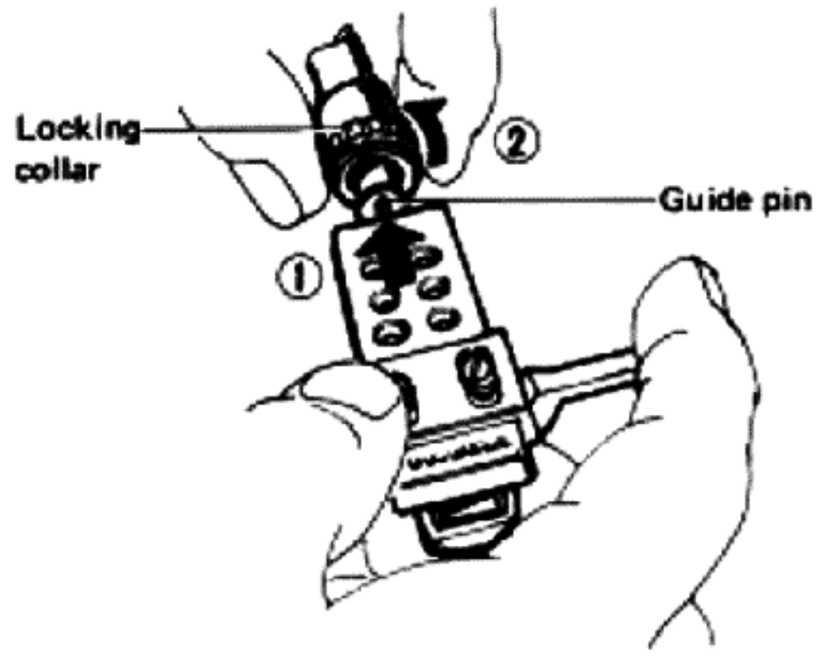


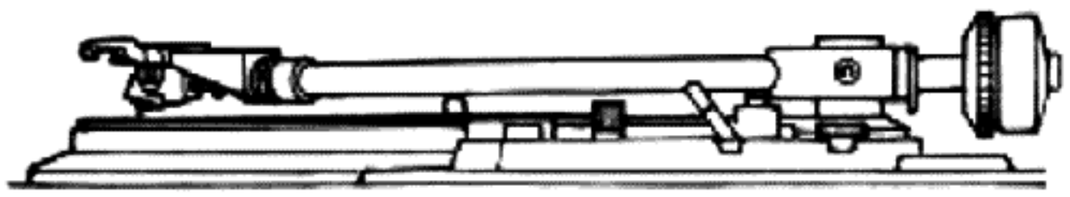
Fig. 5

Fig. 6

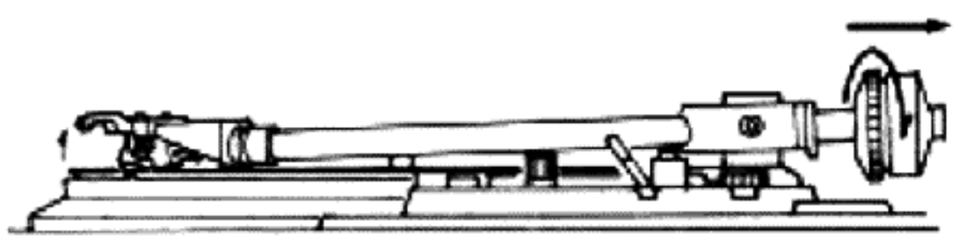
ADJUSTING THE TONEARM

LEVEL BALANCE ADJUSTMENT

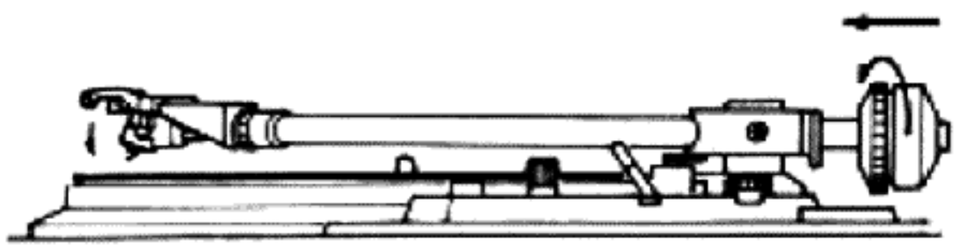
1. Set the ANTI-SKATE knob to "0".
2. Remove the cartridge stylus cover.
3. Set the ARM-ELEVATION lever to the DOWN ▼ position.
4. Release the arm clamp and move the tonearm to the space between the arm rest and the platter, taking care not to damage the stylus.
5. Support the headshell's finger lift with one hand and attain the level balance by turning the counterweight either clockwise or counterclockwise. "Level balance" means that the tonearm is parallel to the record on the platter, and that the tonearm pipe, therefore, should not tilt toward the counterweight side or the headshell side (See Fig. 7).



Tonearm properly balanced



Headshell end is too heavy — Turn the counterweight in the direction of the arrow.



Counterweight end is too heavy — Turn the counterweight in the direction of the arrow.

Fig. 7

6. Return the tonearm to the arm rest and fasten the arm clamp.
7. Attach the stylus cover to protect the stylus.
8. Since the tracking force is zero when the tonearm is balanced level, turn just the tracking force scale ring in front of the counterweight, and set the "0" on the scale to the index line on the shaft (Fig. 8).

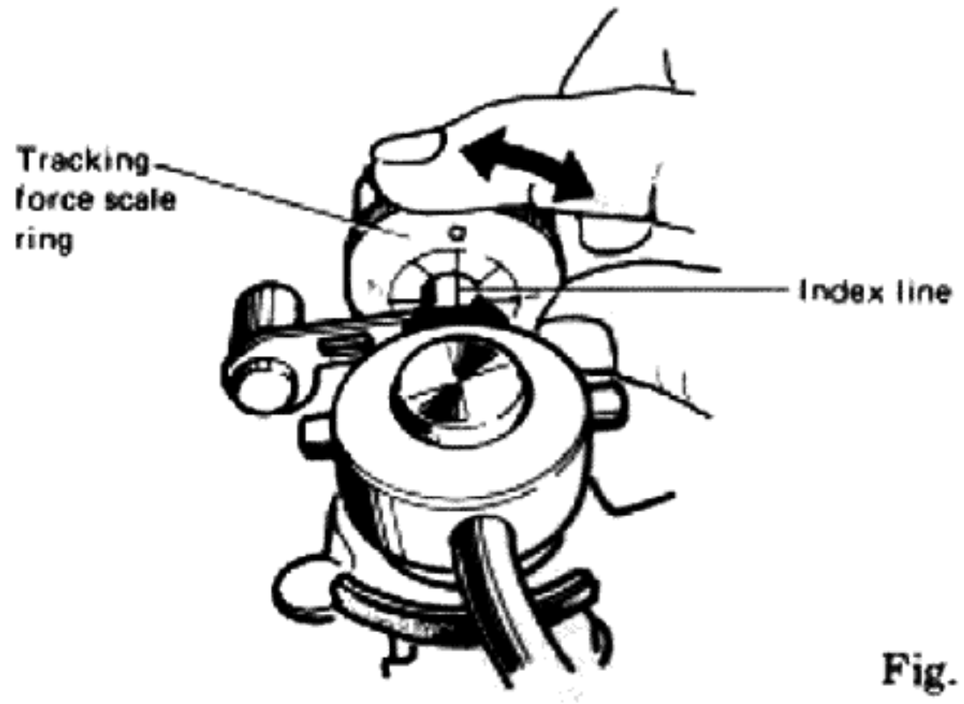


Fig. 8

TRACKING FORCE ADJUSTMENT

Turning the counterweight, set the correct tracking force opposite the index line on the counterweight shaft (Fig. 9).
The tracking-force scale ring has 0.5g steps, and one full turn of the counterweight will yield a tracking force of 4g.

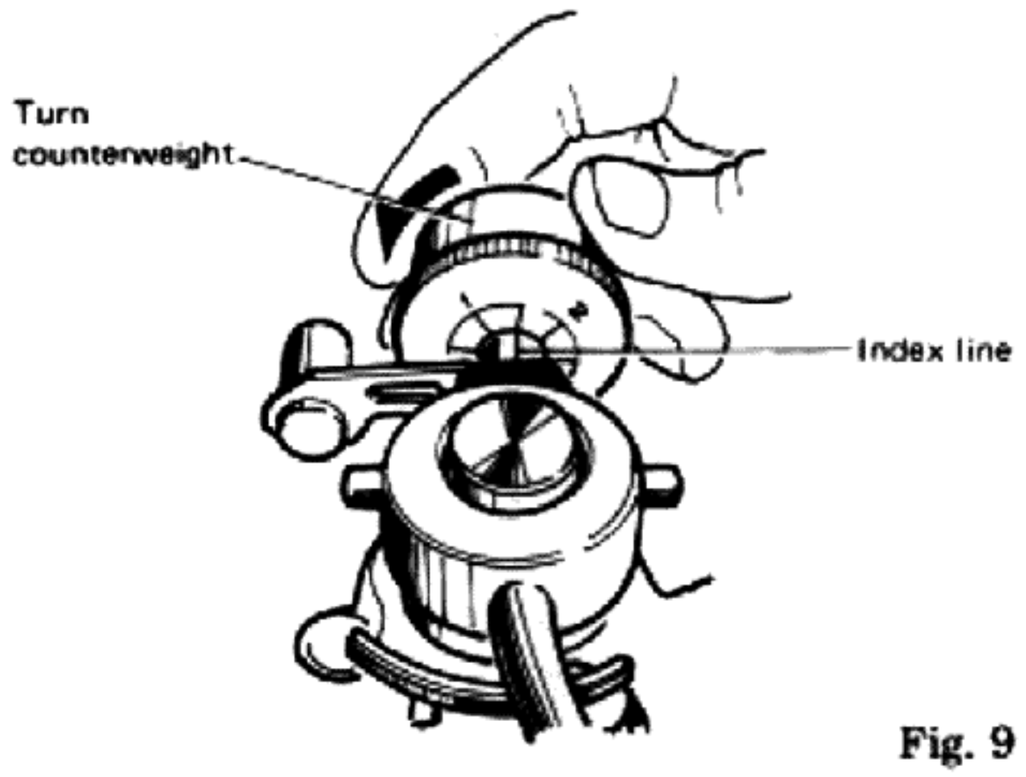


Fig. 9

ANTI-SKATING ADJUSTMENT

To adjust the anti-skating mechanism, turn the ANTI-SKATE knob so that the number corresponding to the required tracking force is opposite the index line (Fig. 10).
The numbers on the ANTI-SKATE knob correspond to 1g of tracking force.

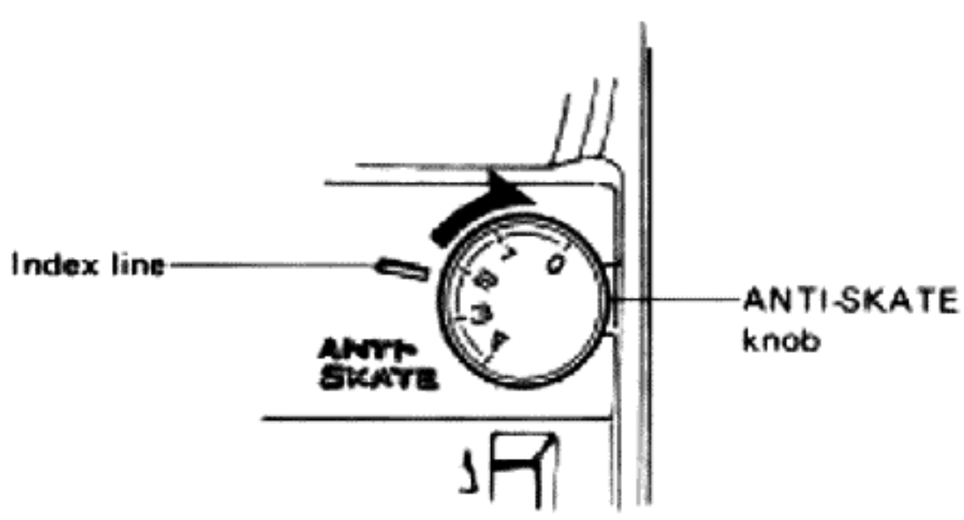


Fig. 10

CONNECTIONS

The PL-518's phono cables and ground lead are attached to the rear panel of the turntable. The phono cable with the white plug is for the left channel and the one with the red plug is for the right channel. The thin wire with the Y-shaped connector at the end is the ground lead. This should be firmly connected to the ground terminal on the amplifier (Fig. 11).
The way in which the phono cables are attached will depend on the type of cartridge used. Read the instructions in the booklet that comes with the cartridge as well as the operating instructions of the amplifier and connect the phono cables properly.

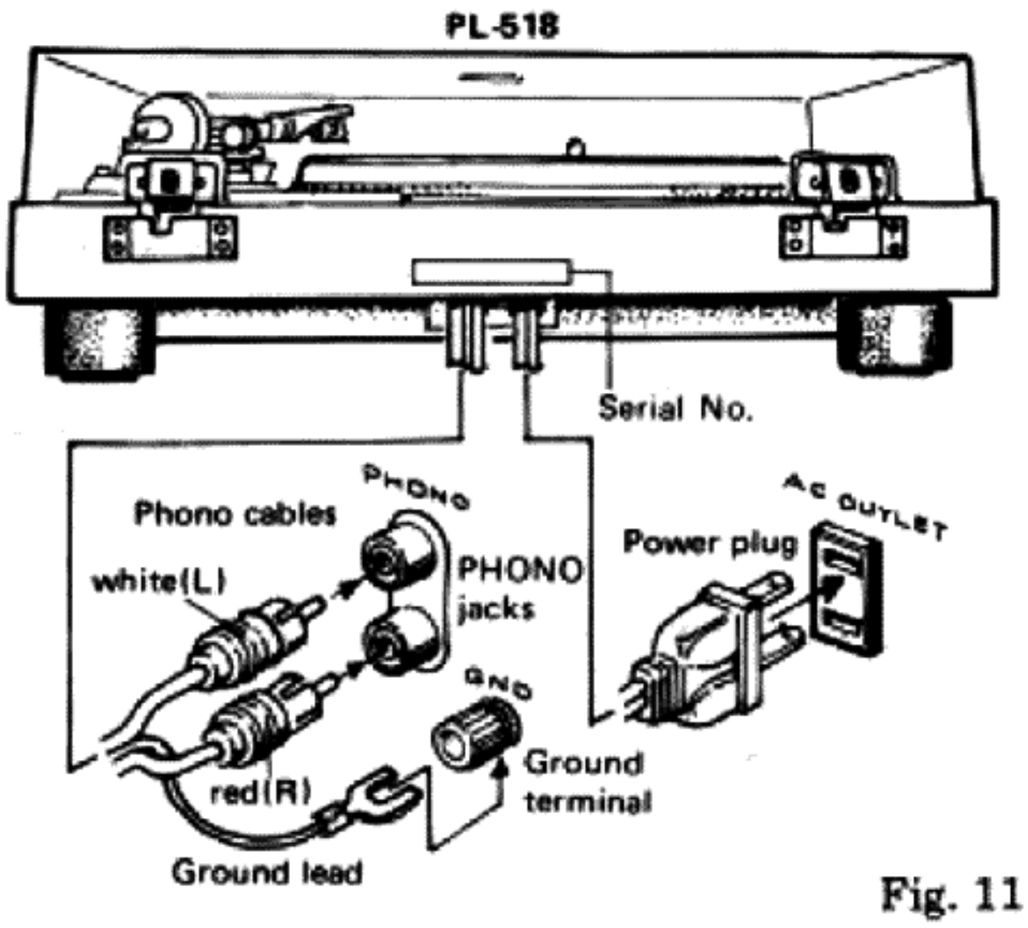


Fig. 11

Finally, plug the power cord into the power outlet. Since the auto-return mechanism may be engaged by vibration during transportation, confirm its operation before play. Move the tonearm over to near the center shaft. The turntable platter begins to rotate and the tonearm returns to the arm rest. If the tonearm starts to move in the direction of the arm rest when moved manually, do not forcibly move it in the direction of the center shaft.

GENERAL PRECAUTIONS

CABINET

When the dust cover or the cabinet is dirty or dusty, wipe them clean with a polishing cloth or soft cloth. Do not use furniture wax or bring the turntable into contact with benzine, insecticides or any other flammable material since they will corrode the outside of the turntable.

MOTOR WORKS PROPERLY AFTER PLATTER IS MOUNTED

If the motor is run with the platter removed, the motor will not operate normally and may seem to have broken down. If, however, the platter is mounted, the motor will rotate properly.

LUBRICATION

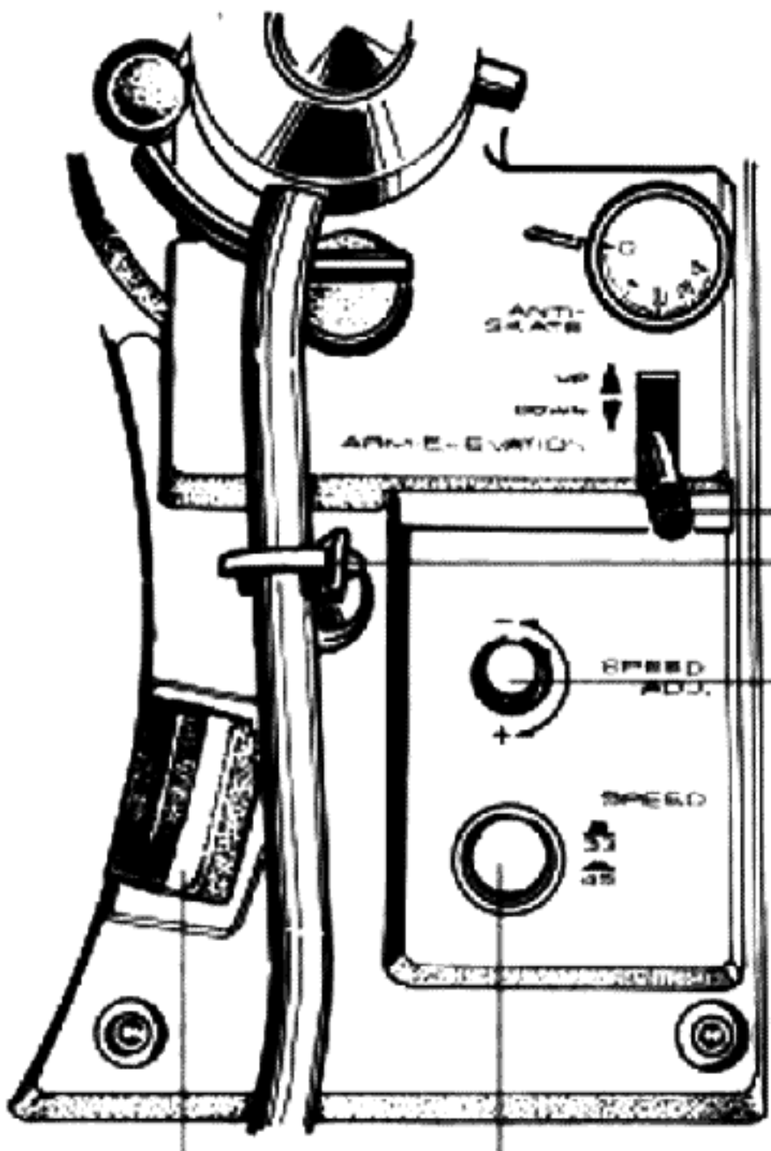
There is no need to lubricate the PL-518 since it employs oil-less bearings in the rotating parts.

INSTALLATION PRECAUTIONS

When installing your PL-518, make sure that you avoid the following conditions:

Conditions to be avoided	Possible problems caused
(1) Exposure to direct sunlight, high temperatures or high humidity.	(1) Can cause rust or interfere with insulation.
(2) Unstable surfaces.	(2) Will interfere with normal operation of turntable (stylus will jump, etc.).
(3) Dirty or dusty locations.	(3) Can cause scratches.
(4) Exposure to heavy vibrations, such as on the top of speakers, etc.	(4) Can cause howl.
(5) Proximity to power transformer of the amplifier.	(5) Can cause hum.
(6) Locations where alcohol, insecticides, or flammable substances are frequently used.	(6) Can corrode dust cover or outside of cabinet.

PANEL FACILITIES AND OPERATION

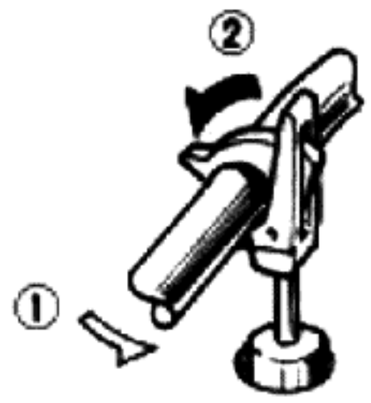


ARM-ELEVATION LEVER (ARM-ELEVATION)

This lever controls the ascent and descent of the tonearm.

ARM REST

Set the tonearm on its rest when it is not playing records.



Closing the clamp

Releasing the clamp

SPEED ADJUSTMENT KNOB (SPEED ADJ.)

Perform fine adjustment of the speed of a record being played with this knob, while looking at the strip of strobe calibration dots on the platter edge.

STROBE LIGHT

This light comes on when the platter starts to rotate and it lights stroboscopically (Refer to "HOW TO FINELY ADJUST THE PLATTER SPEED" on page 7).

SPEED SELECT SWITCH (SPEED)

Push this switch to set the platter to 45rpm and release for 33-1/3rpm.

OPERATION

1. Place the record to be played on the platter.
2. Set the SPEED select switch to the speed at which the record is to be played.
3. Set the ARM-ELEVATION lever to the UP ▲ position.
4. Remove the stylus cover and release the arm clamp.
5. Hold the headshell by the finger lift and move the stylus across the record to the track you want played. The platter will begin to rotate.
6. Observe the appropriate strip of strobe calibration dots on the platter edge. If the strobe dot is not stationery, finely adjust the platter speed with the SPEED ADJ. knob according to "HOW TO FINELY ADJUST THE PLATTER SPEED" on page 7.
7. Set the ARM-ELEVATION lever to the DOWN ▼ position.
   The stylus will descend slowly to the record and play will begin.
8. Adjust the volume and tone controls on the amplifier to the preferred levels, and then sit back and enjoy your record.
9. After the record has been played, the auto-return mechanism is actuated and the tonearm returns to the arm rest. At the same time, the platter stops rotating and the power to the turntable is turned off.
10. Secure the tonearm to the arm rest with the clamp and attach the stylus cover to protect the stylus.

OPERATION PRECAUTIONS

- Be careful not to make the turntable vibrate while a record is playing since this can result in damage to the stylus and record.
- Place only one record at a time on the platter. If two or more records are stacked on the platter, the stylus will not make proper contact with the grooves, and this will impair the quality of reproduction.
- Do not disconnect the power cord while the stylus is still in a record groove as this may result in damage to the stylus and record.
- Never obstract the turntable with the hand while it is rotating. This may cause damage.
- Do not force the tonearm closer than 40mm to the center shaft or away from the arm rest. If this distance is exceeded, you may damage the internal mechanisms and render automatic operation ineffective.

HOW TO FINELY ADJUST THE PLATTER SPEED

Finely adjust the platter speed as follows:

1. Set the ARM-ELEVATION lever to the UP ▲ position.
2. Set the SPEED select switch to either "33" or "45", according to the speed of the record to be played (Fig. 12).
3. Release the arm clamp and move the tonearm to the space between the arm rest and the platter.
4. Observe the appropriate strip of strobe calibration dots on the platter edge (Fig. 13).
5. If the strobe dots appear to flow to the right (which means the platter is rotating more slowly than the rated speed), turn the SPEED ADJ. knob in the + direction and set so that the strobe dots no longer appear to move. If the strobe dots appear to flow to the left (which means the platter is rotating more quickly than the rated speed), turn the SPEED ADJ. knob in the − direction and set so that the strobe dots no longer appear to move.
6. After the platter speed has been adjusted correctly, return the tonearm to the arm rest and secure it with the clamp.

NOTE:
When playing a record which has a different playing speed from the preceding one, the strobe dots may be moved. In this case, finely adjust the platter speed again in the above way.

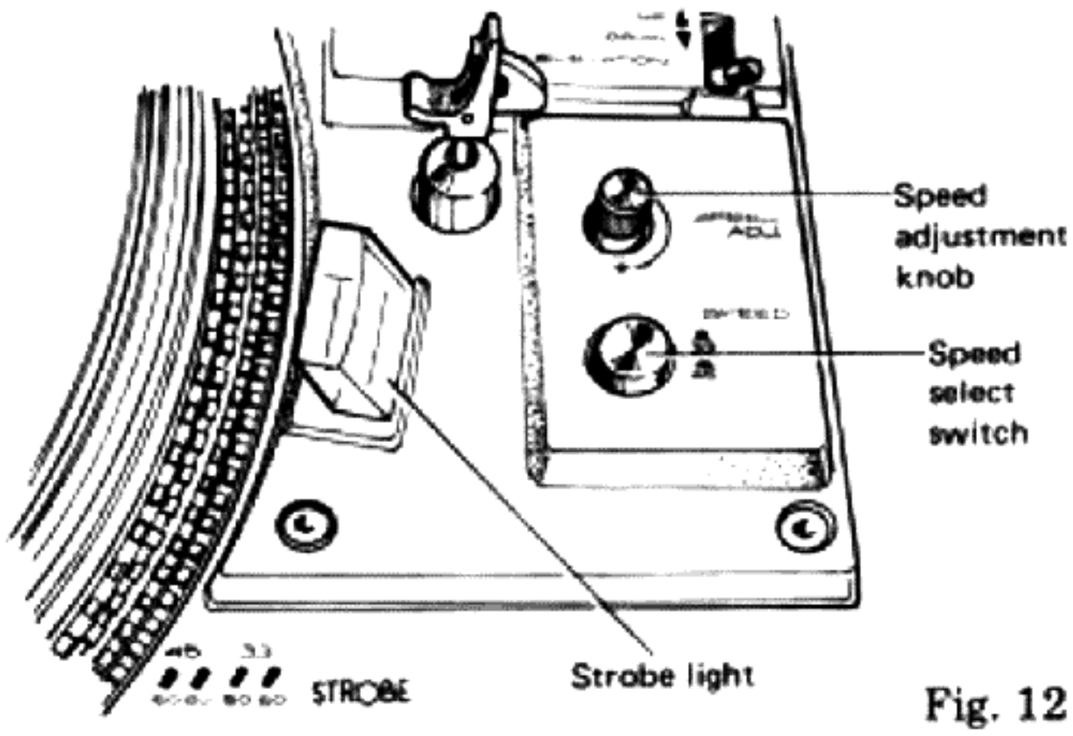


Fig. 12

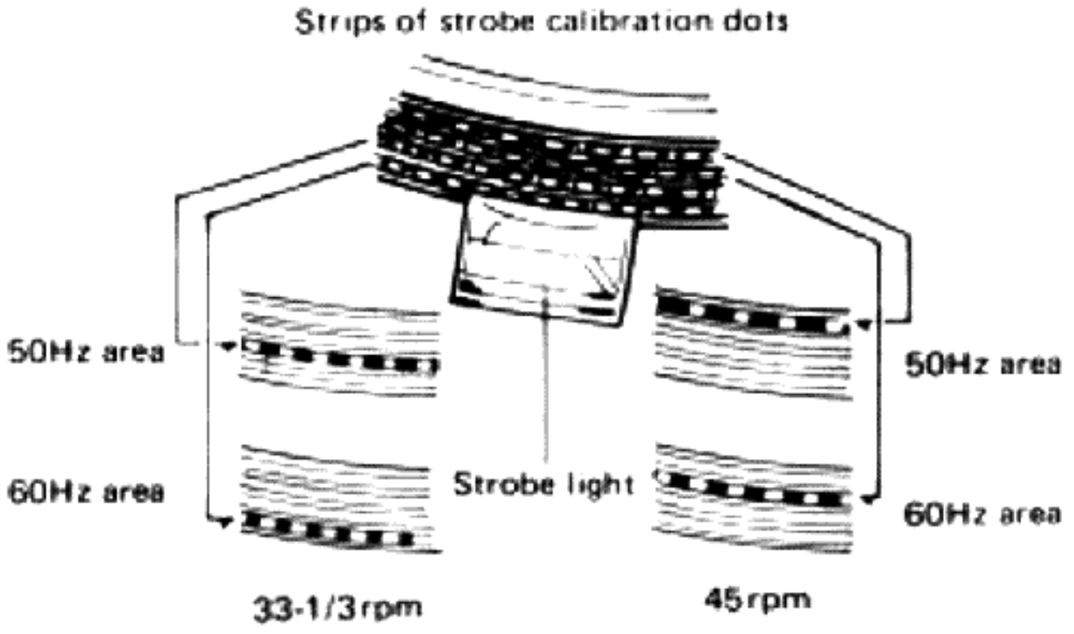


Fig. 13

If the turntable is brought into the warm from previously cold surroundings, or if the room temperature rises suddenly, moisture will form on the operating sections and the turntable will not be able to display its performance to the full.
If confronted with a situation like this, leave the turntable in its new environment for about an hour or try and increase the room temperature gradually before operation.

TROUBLESHOOTING

Sometimes, an operational fault can be mistaken for a malfunction or failure. Check the following points and see if the symptoms of the trouble are outlined below before you get in touch with the serviceman. If you cannot locate the symptoms, contact your nearest Pioneer Service Center, Service Station or authorized Pioneer dealer.

Symptom	Possible trouble	Remedy
Platter does not rotate.	Power cord is unplugged.	Plug cord securely into wall outlet.
No sound	1. Phono cables are not connected properly. 2. Headshell is not properly attached. 3. Cartridge lead wires are loose. 4. Amplifier is not being operated properly. (Function switch, tape monitor switch, speaker switches, etc. not set correctly).	1. Connect cables securely to the PHONO jacks on the amplifier (see page 5). 2. Firmly secure tonearm locking collar (see page 3). 3. Attach lead wires inside headshell properly (see page 1). 4. Read the operating instructions that come with amplifier.
Musical tempo is off.	1. Platter speed is not set properly. 2. Strobe dots appear to move.	1. Refer to "PANEL FACILITIES AND OPERATION" on page 6. 2. Refer to "HOW TO FINELY ADJUST THE PLATTER SPEED" on page 7.
Excessive noise	1. Ground lead is not connected. 2. Tracking force is not correct. 3. Dust of dirt has collected on the stylus tip. 4. Dust or dirt has collected on the record.	1. Connect properly to the amplifier's ground terminal (see page 5). 2. Refer to "TRACKING FORCE ADJUSTMENT" on page 4. 3. Clean the stylus tip with a soft brush. 4. Clean the record with a good quality cleaner.
Sound is distorted.	1. Dust or dirt has collected on the stylus tip. 2. Tracking force is not correct. 3. Stylus is worn. 4. Amplifier's tone controls set too high.	1. Clean the stylus tip with a soft brush. 2. Refer to "TRACKING FORCE ADJUSTMENT" on page 4. 3. Replace with new stylus. 4. Set tone controls to lower position.
Intermittent sound	1. Tracking force is not correct. 2. Stylus is worn. 3. Record is scratched or warped.	1. Refer to "TRACKING FORCE ADJUSTMENT" on page 4. 2. Replace with new stylus. 3. Replace record.

If you detect any trouble when playing records, the fault may not lie with the turntable but with another hi-fi component. Be sure to check the amplifier, speaker systems, and any other electrical equipment which you are using in the vicinity of the turntable.

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